

KEY

Heredity Study Guide - Path A

Use this to help you review for your quiz on Thursday.

In addition to completing these questions, practice the vocabulary on the vocab sheet!

Part 1: Genotype and Phenotype

Horn Color	Purple (W)	White (w)
Ear shape	Pointy (Y)	Round (y)
Tail Shape	Curly (C)	Straight (c)
Tail Color	Purple (P)	Orange (p)

1. If a monster is heterozygous for their tail color, what is the genotype? Pp
2. If a monster is homozygous dominant for tail shape, what is the phenotype? curly
3. If the genotype is WW, what is the the phenotype? purple horn
4. If the phenotype is round ears, what is the genotype? yy
5. If the genotype is PP, what is the tail color? purple
6. If the genotype is Cc, what is the tail shape? curly
7. If the tail color is orange, what is the genotype? pp
8. If the horn color is white, what is the genotype? ww
9. If the genotype is Pp, what is the tail color? purple
10. If the genotype is Yy, what is the phenotype? pointy

Part 2: Punnet Squares

1. Brown eyes are dominant over blue eyes. B= Brown eyes b= blue eyes
Mom= Bb Dad= BB

	B	b
B	BB	Bb
B	BB	Bb

What are the genotypes of the children?

BB, Bb

What are the phenotypes of the children?

Brown eyes

2. Curly hair (h) is recessive, and straight hair (H) is dominant. A woman with curly hair marries a man who is homozygous dominant for straight hair.

	h	h
H	Hh	Hh
H	Hh	Hh

What percentage of the children will have curly hair?

0%

3. Black hair (B) is dominant. Blonde hair (b) is recessive.

	B	b
B	BB	Bb
b	Bb	bb

What are the possible phenotypes of the children?

black hair, blonde hair

What percentage of the children will have blonde hair?

~~0%~~ 25%

4. Attached earlobes are dominant over free hanging earlobes. Complete the Punnett Square for the following individuals: Mom=EE and Dad=Ee

	E	e
E	EE	Ee
e	Ee	ee

What percentage of the children have a homozygous genotype?

50%

